HOW THE NATIONAL ESTUARY PROGRAM IS TACKLING NUTRIENT POLLUTION

Nutrient pollution in the United States impacts 65% of the nation's major estuaries and has been shown to cost the U.S. at least $2.2 billion annually. Harmful algal blooms caused by nutrient pollution in U.S. coastal waters cost the U.S. economy an estimated $82 million annually. Nutrient pollution may also contribute to hypoxia and coastal acidification that impacts coastal ecosystems and marine organisms, including corals and commercially-important shellfish.

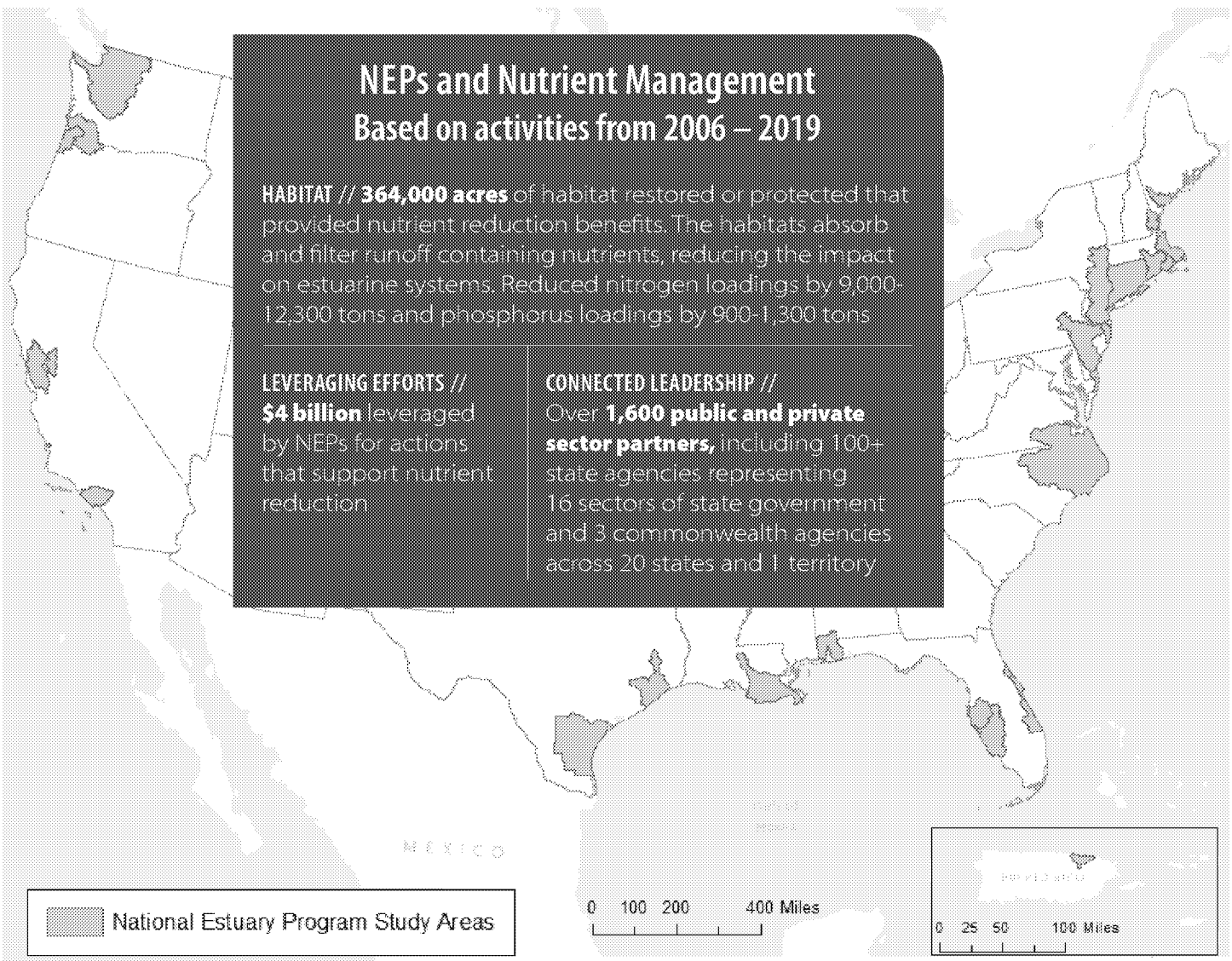
Through non-regulatory, consensus-based programs, NEP leaders have contributed to 894 nutrient management actions since 2006.

NEPs and Nutrient Management
Based on activities from 2006 – 2019

HABITAT // 364,000 acres of habitat restored or protected that provided nutrient reduction benefits. The habitats absorb and filter runoff containing nutrients, reducing the impact on estuarine systems. Reduced nitrogen loadings by 9,000-12,300 tons and phosphorus loadings by 900-1,300 tons.

LEVERAGING EFFORTS // $4 billion leveraged by NEPs for actions that support nutrient reduction.

CONNECTED LEADERSHIP // Over **1,600 public and private sector partners,** including 100+ state agencies representing 16 sectors of state government and 3 commonwealth agencies across 20 states and 1 territory.

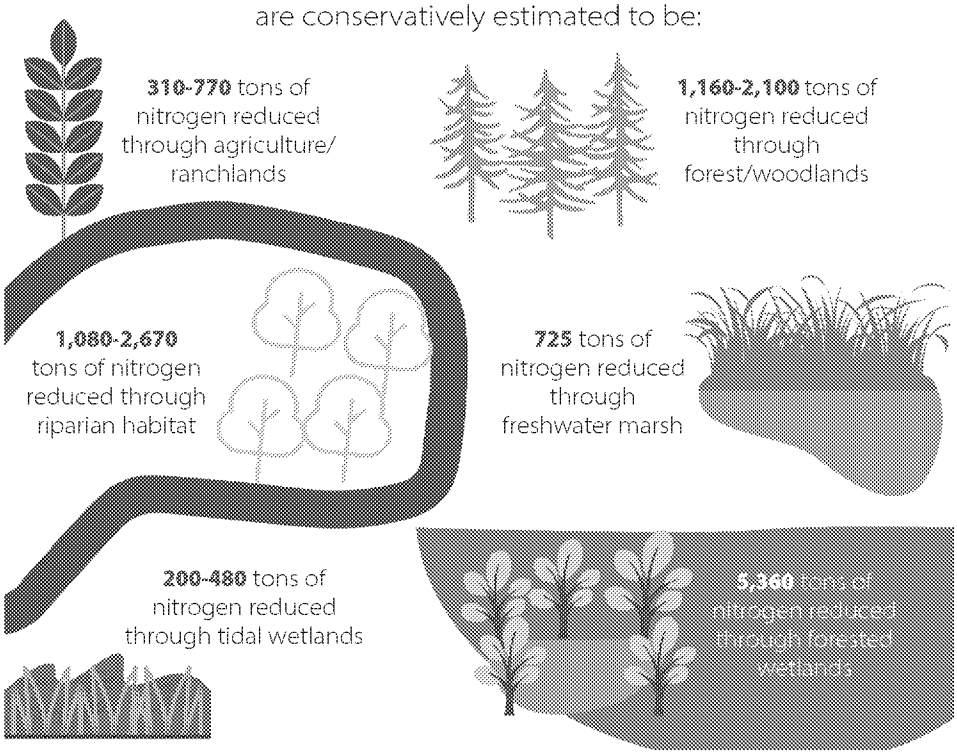


The NEP is reducing excess nutrients in coastal communities by working with government, businesses, and communities to:

- **Monitor and assess water quality and habitat conditions**
- **Design tailored solutions to reduce pollution entering waterways**
- **Support implementation of watershed-wide nutrient reduction plans**
- **Promote the use of innovative green infrastructure at local and landscape scale**

Nutrient Reduction Benefits of Habitat Protection and Restoration

Nutrient loadings reductions from the protection and restoration of coastal habitats by all 28 NEPs from 2006-2019 are conservatively estimated to be:



The protection and restoration of coastal habitats by all 28 NEPs from 2006-2019 resulted in meaningful reductions in nutrient loadings.

9,000-12,300 TONS of nitrogen reduced by 28 NEPs through habitat projects since 2006 =

nitrogen in **4.5-6.2 million** bags of fertilizer *(based on a 40-lb bag of 10-5-10 fertilizer)* **or**

nitrogen leached into the groundwater by **121-166 thousand** septic systems each year for 14 years **or**

nitrogen produced by **109-150 thousand** dairy cows

900-1,300 TONS of phosphorus reduced by 28 NEPs through habitat projects since 2006 =

phosphorus in **970 thousand-1.3 million** bags of fertilizer *(based on a 40-lb bag of 10-5-10 fertilizer)* **or**

phosphorus leached into the groundwater by **198-274 thousand** septic systems each year for 14 years **or**

phosphorus produced by **76-105 thousand** dairy cows